## COLLABORATIVE APPROACH FOR ONE OF MELBOURNE'S TALLEST BUILDINGS

MAIN CONSTRUCTION COMPANY: Hickory Group CONSTRUCTION VALUE: \$161 million COMPLETION DATE: Late 2014 ARCHITECT: Bruce Henderson Architects STRUCTURAL ENGINEER: Meinhardt Group SURVEYOR: PLP Building Surveyors

AUSTRALIAN NATIONAL CONSTRUCTION REVIEW

## The \$161M, 568 Collins St. Project will be one of the tallest towers in the Melbourne CBD. It contains 567 units and first class amenities such as pool, spa, sauna, gym and includes many engineering innovations due to its compact 30m by 40m site.

**568 Collins Street is one of the newest towers to grace Melbourne's skyline.** The 68-storey tower comprises of 567 apartments, spanning 51 levels, with retail tenancies and a ten-storey podium car park to house 266 cars. Residents can enjoy the first class amenities such as a pool, spa, sauna and gym.

One of the tallest towers within the CBD, the \$161 million project was extremely complex due to the compact nature of the site—a mere 30m by 40m. The project was overseen by Hickory Group, who worked closely on the design buildability with the client, design engineers and architects, resulting in a solution that is viable on a cost and design level, while delivering a transferfree structure through the apartment levels.

Over a period of 36 months, Hickory have directly employed workers to undertake the construction of structure, façade installation and carpentry works, supplemented by a committed team of over fifty subcontractors. The development has utilised a core alternative to sheer walls for stability, linked at two levels to four large outrigger columns.

The small 1200m<sup>2</sup> site footprint is nearly completely occupied by the building, creating a very limited laydown area. Hickory overcame this challenge by negotiating with the property owner of the adjoining building, to construct a temporary gantry on the rooftop, providing additional space for construction and material movement. The site also required over 100 bearing piles, ranging from 450mm to 1200mm in diameter. Progress of this stage was hindered due the soil conditions, requiring the piles to be poured under bentonite.

With 68 levels to navigate both materials and manpower up and down, Hickory implemented two external high speed hoists, one internal hoist within the lift core and a jump lift, as well as providing amenities located at various levels.

Adjoining neighbour rooftops were both occupied by childcare centres.

Mutually agreed access times to these rooftops allowed Hickory to coordinate lifting on those elevations during non-access times. As an added safety measure for the childcare centres, six level safety screens were developed to allow external works, such as curtain wall installation, to occur behind them, providing a barrier between the buildings.

Hickory also utilised their innovative new Sync Building Systems bathroom technology on the 568 Collins Street project. 794 modular bathroom PODS were manufactured offsite, complete with tiling, joinery, finishes and fittings. Falls and drainage were built into the entry-level slab base, so the PODS were simply positioned into place, with final connections made onsite. This process allowed for a more controlled environment that contributed to a higher quality bathroom, as well as reducing site works and congestion of bathroom activities. It also resulted in flow-on effects for workforce numbers, amenity requirements and reduced rubbish.

This collaborative approach, coupled with Hickory's expertise and innovations, has resulted in an iconic addition to Melbourne's CBD skyline. Further outstanding projects that Hickory are also working on include Fulton Lane, Istana and Central South Yarra.

Founded in 1991, the Hickory Group has evolved into one of Australia's most outstanding construction companies. A nationwide group of construction, plant hire, crane logistics, formwork and manufacturing specialist, Hickory have over 450 valued employees who partner with their clients, subcontractors and suppliers to ensure the most efficient and effective solutions are met on every project.

*For more information contact Hickory Group,* 101 Cremorne Street Richmond VIC 3121, phone 03 9429 7411, fax 03 9428 7376, email info@hickory.com.au, website www.hickory.com.au





## IBUILD HAVE THE JOB COVERED

Within Ibuild's three years of business, they have built a solid reputation and name for themselves within the window and curtain wall industry. Specialising in aluminium windows, doors, curtain walls and other façade items, the professional and experienced team of ten strive to deliver exceptional quality on every project.

Having been previously contracted by the Hickory Group for window supplies of Travancore Stage 3, 101 Bay Street, and Bayside Park, they were again selected to design and supply the windows, doors and curtain walls for the 568 Collins Street project.

A team of five from Ibuild worked on the job, delivering approximately 9000 panels in total. The project required an in/out curtain wall that spanned 12 floors as well as a snap-shut window system throughout the 69 storey building, which called upon Ibuild's innovative engineering expertise.

Ibuild's quality of products, as well as their ability to deliver in short time periods, has also won them contracts on AIA, Fulton Lane and Tip Top.

Ibuild are well-known for their efficiency and adaptability, which is due to their outstanding communication skills and relationships with their manufacturers in China. The communications and effort they put in from the design phase through to the procurement, production and logistics stages, sets Ibuild apart from their competitors. This results in faster turn-around, as drawings don't have to be sent to China, and there is no long waiting periods for the goods to arrive.

Having built a solid supply chain in China from High Performance Glass to Aluminium Extrusions. Ibuild are now the exclusive Australian agent of JinJing Group Co. Ltd, which is China's leading, and largest, glass manufacturer. The ability, professionalism and work ethic of Ibuild's suppliers in China, flows through to the timely delivery of the final product on projects within Australia.

For more information, please contact Ibuild, 41 Ricketts Road, Mt. Waverly VIC 3149, phone 03 8555 9511, fax 03 8555 9510, email tim@ibuildcorp.com.au



## REINFORCING THE CONSTRUCTION INDUSTRY

Mesh & Bar Pty. Ltd. has grown to become one of Australia'simproving construction time and eliminating the need for additional<br/>work space on the site.

Operating out of Sydney, Brisbane, Melbourne, Newcastle, Wollongong and the Sunshine Coast, Mesh & Bar supply the Australian construction industry with a wide range of concrete reinforcing products, including reinforcing mesh, reinforcing bar, concrete accessories, and various building products.

With a team of skilled professionals coupled with the use of the latest plant and equipment, Mesh & Bar have experienced significant growth since they were first established in 1999, and their impressive skill set was called upon for the 568 Collins St project.

Mesh & Bar supplied the materials to fulfill the reinforcing needs on the Collins Street project. They were able to offer the use of added value products and services, such as prefabricated cages to hasten construction. A scheduler from Mesh & Bar was part of the Collins Street team, to schedule and coordinate all the activities relevant to the reinforcing needs on the project. Here are the project and the project and the project. They were able to offer the use of the collins Street team, to schedule and coordinate all the activities relevant to the reinforcing needs on the project. Here are prompt, accurate and ensure quality is met and safety is at the forefront.

Mesh & Bar prefabricated various structural reinforcing elements including columns and pads. By manufacturing in-house in a controlled environment, safety and quality levels can be improved. Prefabricated elements are also ready to be delivered when called upon, greatly The 568 Collins St project was one with significant access constraints, and with a building footprint that occupied the entire site, it required a significant level of coordination with the site to meet crane times from two different site fronts.

Further projects Mesh & Bar are currently working on include The Icon Apartments, St Kilda; Eastland Shopping Centre, Ringwood; Multilevel Car park, Toorak; Grand 8 Apartments, Melbourne; and Fulton Lane Apartments, Melbourne, to name just a few.

For more information contact Mesh & Bar Pty Ltd, 396 Mt Derrimut Road, Derrimut VIC 3030, phone 03 8353 6500, fax 03 8353 6599, email salesvic@meshbar.com.au